

REMARKS

Attention is respectfully directed to the attached photocopy of a Declaration under 37 C.F.R. §1.132 by the joint inventor Suzuki. The specification has been amended at p. 56 in light of this Declaration, to set forth expressly a point of information which was necessarily inherent in the original disclosure (and which, therefore, does not involve new matter), as discussed below.

Claim 1 has been amended by adding thereto the limitation originally set forth in dependent claim 7, which has accordingly been canceled as redundant; in addition, claims 1, 20 and 38 have been amended to specify the magnetic field strength at which the recited range of saturation magnetization is determined. Claims 10 and 13 have been rewritten in response to the rejection of claims 10 - 22 under 35 U.S.C. §112, second paragraph, and Claim 21 has been rewritten in independent form to incorporate all the recitals of claim 13 (including the amendments herein made to claim 13), on which it was originally dependent.

Since this Amendment increases by one the number of independent claims (although the total number of claims is reduced), a check in payment of the requisite fee of \$84 is submitted herewith.

Claims 1 - 6, 8 - 22, 30 and 32 - 40 are in the application. Of these, independent claims 8, 30 and 39 have been allowed, and claim 21 has been indicated to be allowable if rewritten in independent form to incorporate all limitations of claim 13 (as has now been done) and to overcome the §112 rejection. All the other claims have been rejected, on grounds now to be discussed.

Rejections under §112

(1) Claims 7, 20 and 38

Claims 7, 20 and 38 have been rejected under 35 U.S.C. §112, second paragraph, as indefinite in that they recite a limiting range of saturation magnetization of the toner without specifying the magnetic field strength at which the saturation magnetization is determined. The Examiner (final Office Action, p. 4) notes that "As shown in . . . [EP'507], the value of the saturation magnetization appears to change with the strength of the magnetic field."

Attached hereto is a Declaration (photocopy) under 37 C.F.R. §1.132 by the joint applicant Suzuki, setting forth that all the values of saturation magnetization of toners set forth in the Examples and Comparative Examples of the present application were determined by tests performed by him or under his direction, and that all these values were determined at a magnetic field of 10 kOe; hence they are all values of saturation magnetization at a magnetic field of 10 kOe.

By this Amendment, a paragraph has been inserted in the specification at p. 56, ahead of the descriptions of the Examples and Comparative Examples, stating that

"All values of saturation magnetization of toners set forth in the following Examples and Comparative Examples were determined at a magnetic field of 10 kOe, and are, therefore, values of saturation magnetization at a magnetic field of 10 kOe."

Although the magnetic field strength (10 kOe) was not expressly set forth in the application as originally filed, it was necessarily inherent in the measured values of saturation magnetization

(for the Examples and Comparative Examples) that were specified in the original disclosure, because (as established by the attached Declaration under §1.132) those values were in fact determined at a magnetic field of 10 kOe; and the value of saturation magnetization, for a given toner, is dependent on the magnetic field strength at which it is determined. Hence, the paragraph herein added to the specification does not introduce new matter but merely makes explicit what was already inherent in the disclosure as originally filed.

This inherent disclosure establishes that the values and ranges of saturation magnetization set forth throughout the application refer to saturation magnetization determined at a magnetic field of 10 kOe. Consequently, the above-quoted paragraph added to the specification by this Amendment supplies the requisite written description for claim recitals specifying the field strength ("at a magnetic field of 10 kOe") to which the defined range of saturation magnetization values refers.

By the present Amendment, recitals of the magnetic field of 10 kOe (at which the saturation magnetization is determined) have been introduced to claims 20 and 38, as well as to amended claim 1 which (as noted above) now includes the saturation magnetization limitation of canceled original claim 7. It is submitted that these recitals self-evidently cure the asserted indefiniteness of claims 7 (now 1), 20 and 38, thereby fully overcoming the §112 rejection of those claims.

(2) Claims 10 - 12 and 13 - 22

Independent claims 10 and 13 have been rejected under §112, second paragraph, as indefinite in their recitals of

"capable of changing a state of incorporation of said toner in said two-component developer on the developer bearing member by changing a state of contact of said two-component developer in accordance with changes in concentration of said toner in said two-component developer on said developer bearing member"

In response to this rejection, and taking into account the Examiner's comments at p. 8 of the final Office Action, applicants have amended the quoted recitals in claims 10 and 13 to read:

"capable of changing addition of additional toner to said two-component developer on the developer bearing member by changing a state of contact of said two-component developer on said developer bearing member with said additional toner in accordance with changes in concentration of toner in said two-component developer on said developer bearing member"

It is believed that these amended recitals, by setting forth "changing addition of additional toner," overcome the asserted ground of rejection under §112, second paragraph, of claims 10 - 12, 13 - 20 and 22.

In rewriting claim 21 in independent form to incorporate all the limitations of claim 13, on which it was heretofore dependent, the above-discussed amendments to the recitals of original claim 13 have been included. Therefore it is believed that amended claim 21 overcomes the §112 rejection as well.

Rejections under §103(a)

Claims 1 - 7, 9 - 20, 22, 32 - 38 and 40 have been rejected under 35 U.S.C. §103(a) as unpatentable over Asanae '699 combined with EP '507, with which additional teachings of the same references are further combined in the rejection of claims 4, 17 and 35; Asanae '289 is further combined in the rejection of claims

9, 22 and 40; and Oka is further combined in the rejection of claims 10 - 20 and 22.

Each of the independent claims thus rejected, i.e., claims 1, 10, 13 and 32, is expressly limited to a two-component developer comprising a magnetic carrier and a toner for developing a latent electrostatic image to a toner image, the toner comprising (a) a binder resin, and (b) a magnetic material which is blackened by coating the surface of a magnetic powder with a coloring agent. Claim 1 is directed to the developer per se, while claim 10 is directed to an image-forming method using the developer and claims 13 and 32 are directed to apparatus including or containing the developer.

The Examiner asserts that Asanae '699 "discloses a two-component developer that is within the compositional limitations recited in the instant claims, but for the particular magnetic material surface coated with a pigment," and that EP '507 "discloses . . . magnetite particles surface coated with carbon black" but "does not disclose that its magnetic toner can be used in a two-component developer comprising a magnetic carrier." It is the Examiner's position that "to use EP '507's magnetic toner in the two-component developer disclosed by Asanae '699" would have been obvious because a person of ordinary skill in the art "would have had a reasonable expectation of successfully obtaining a two-component developer and an image forming apparatus comprising said two-component developer having the properties disclosed by Asanae '699 and providing high quality black toned images."

Applicants respectfully submit, however, that in general the developing process using a one component developer is different from the developing process using a two component developer, and therefore one component developers are considered to be entirely

different from two component developers. In addition, requirements for one component developers are different from those for two component developers. Consequently, it would not have been obvious to use a toner, disclosed only for use as a one component developer, as the toner component of a two component developer.

In other words, developing processes using one component and two component developers are so different from each other that a person of ordinary skill in the art would not look to one component developers (toners) for suggestions for modification or improvement of the toner component of a two component developer.

Applicants therefore further submit that the aforementioned expressly recited limitations defining a two component developer and the toner component thereof distinguish each of independent claims 1, 10, 13 and 32 (and all the claims respectively dependent thereon) clearly and patentably over Asanae '699 and EP '507, considered together, i.e., because it would not have been obvious to combine their teachings in the manner asserted in the final Office Action.

The additional teachings of Asanae '699 and EP '507, and the secondary references Asanae '289 and Oka, combined with the above-discussed disclosures of Asanae '699 and EP '507 in the rejection of certain claims, add nothing to the latter disclosures with respect to the novel and distinguishing features of the two component developer and its toner component set forth in each of independent claims 1, 10, 13 and 32. Hence, all claims now in the application are believed allowable over the applied references.

Claim 1 as herein amended is submitted to distinguish further over Asanae '699 and EP '507 by the recital that the toner has a saturation magnetization of 10 emu/g to 25 emu/g at a magnetic field of 10 kOe. In the final Office Action, at p. 11, it is

noted that a magnetic toner described in EP '507 "has a saturation magnetization of 22.2 emu/g at 1 kOe." But as the Examiner acknowledges (final Office Action, p. 4), EP '507 itself shows that "the value of the saturation magnetization appears to change with the strength of the magnetic field." In particular, Example 20 of EP '507, the specific toner cited by the Examiner as having a saturation magnetization of 22.2 emu/g at 1 kOe, has a saturation magnetization of 29.6 emu/g at 10 kOe. See Table 7 at p. 37 of EP '507. Thus, the EP '507 toner relied on by the Examiner has a saturation magnetization outside the range of 10 emu/g to 25 emu/g at a magnetic field of 10 kOe, to which amended claim 1 is now limited.

Claims 2 - 6 and 9, being dependent on claim 1, distinguish in like manner over the art of record, as do claims 20 and 38 which have been amended to specify that the recited saturation magnetization range of 10 emu/g to 25 emu/g is saturation magnetization at a magnetic field of 10 kOe.

Double Patenting

The provisional obviousness-type double patenting rejection of a number of the claims (citing Application '877 in view of Diamond, with which other references of record are also combined in the rejection of certain claims) is noted. It is understood, however, that the submission of a terminal disclaimer or other appropriate response may be deferred so long as the rejection remains provisional.

Claim 21

As mentioned above, claim 21 has been rewritten in independent form to incorporate all the recitals of claim 13, on which it was heretofore directly dependent, and to include all the same revisions herein made to claim 13 to overcome the rejection under \$112, second paragraph.

In view of the indication of allowability set forth at p. 20 of the final Office Action, it is therefore submitted that claim 21 is now allowable.

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For the foregoing reasons, it is believed that this application is now in condition for allowance. Favorable action thereon is accordingly courteously requested.

Respectfully,

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I hereby certify that this paper is being deposited this date with the U.S. Postal Service as first class mail addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Reg. No. 22,031 Date SEPT. 22, 2003